Supply Chain- Logistics Integration: Exploring the Interrelationship and Its Impact on Business Performance and Sustainable Success

Aniket Sharma, Abhishek H, Anirbandam Chowdhury, Dr. Vijayakumar Thota

Professor, NSB Academy, Banglore

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THEORETICAL BACKGROUND OF THE STUDY

Supply chain–logistics integration refers to the strategic coordination and synchronization of logistics activities (transportation, warehousing, inventory management) with overall supply chain processes such as procurement, production, and distribution. It emphasizes seamless collaboration among internal departments and external partners including suppliers and customers. Supply chain integration (SCI) is defined as the alignment of processes, information, and decision-making across the entire supply chain network to ensure efficient flow of goods, services, and information.

The theoretical foundation of this study is rooted in systems theory, resource-based view (RBV), and network theory. Systems theory suggests that organizations operate as interconnected systems where efficiency depends on coordination among subsystems. In the context of supply chains, logistics functions must be integrated with procurement, production, and distribution to avoid inefficiencies. The RBV theory highlights that integrated supply chain capabilities, such as information sharing, collaboration, and coordination, serve as strategic resources that enhance competitive advantage. Logistics integration specifically focuses on collaboration between firms and logistics service providers, ensuring synchronization of intra- and inter-organizational processes. It involves coordination between logistics, marketing, and information technology functions to improve operational efficiency. Supply chain integration consists of three dimensions: internal integration, supplier integration, and customer integration, all of which collectively improve operational and financial performance. Furthermore, sustainability theory plays a crucial role in modern supply chains. Sustainable supply chain management incorporates environmental, social, and economic considerations to ensure long-term business success. Integration enables transparency, resource optimization, and reduced environmental impact. Thus, the interrelationship between supply chain and logistics integration is critical for achieving efficiency, responsiveness, and sustainable business performance in today's competitive and dynamic environment.

CONTRIBUTIONS OF THE STUDY

Business

This study provides valuable insights into how supply chain–logistics integration enhances overall business performance. Integration improves coordination between various functional areas such as procurement, production, warehousing, and distribution, leading to streamlined operations and reduced inefficiencies. By aligning logistics with supply chain processes, organizations can minimize delays, reduce inventory costs, and improve service levels. One of the key contributions is improved operational efficiency. Integrated supply chains enable real- time information sharing, allowing firms to respond quickly to market changes and customer demands. This responsiveness helps businesses maintain competitiveness in dynamic markets. Research shows that supply chain integration significantly enhances both operational and financial performance by improving decision-making and resource utilization. Another important contribution is cost reduction. Integration eliminates duplication of activities, reduces transportation and storage costs, and minimizes wastage. It also improves demand forecasting accuracy, reducing the risk of overstocking or stockouts. The study also highlights the role of integration in innovation. Close collaboration with suppliers and logistics partners fosters knowledge sharing and technological advancements, enabling businesses to develop new products and services. Additionally, integrated logistics systems enhance visibility across the supply chain, improving risk management and reducing disruptions. From a strategic perspective, integration supports sustainability by optimizing resource

usage, reducing carbon emissions, and promoting ethical sourcing practices. Businesses adopting integrated supply chain strategies are better positioned to achieve long-term growth and resilience.

Community

The study of supply chain–logistics integration also has significant implications for the community and society at large. Efficient and integrated supply chains contribute to improved availability of goods and services, ensuring that consumers receive products on time and at reasonable prices. This enhances the overall quality of life and supports economic stability. One of the major contributions to the community is employment generation. Integrated supply chains require skilled professionals in logistics, transportation, warehousing, and information technology. This creates job opportunities and supports skill development in the workforce. As businesses expand their integrated operations, they contribute to regional economic development. The study also emphasizes sustainability, which directly benefits society. Sustainable supply chain practices focus on reducing environmental impact through efficient resource utilization, waste reduction, and lower carbon emissions. Integrated logistics systems enable better planning and optimization of transportation routes, reducing fuel consumption and pollution. Another key contribution is improved transparency and ethical practices. Integrated supply chains promote accountability among suppliers and partners, ensuring fair labor practices and responsible sourcing. This helps in building trust among consumers and stakeholders. Additionally, efficient supply chains play a crucial role during emergencies and crises. Integrated logistics systems ensure timely delivery of essential goods such as food, medicines, and relief materials, thereby supporting disaster management and public welfare. Furthermore, local businesses and small enterprises benefit from integrated supply networks by gaining access to broader markets and distribution channels.

This promotes inclusive growth and reduces regional disparities.

Academia

From an academic perspective, this study contributes to the existing body of knowledge in supply chain management and logistics by exploring the interrelationship between integration and business performance. It provides a comprehensive understanding of how different dimensions of integration-internal, supplier, and customer collectively influence organizational outcomes. The study strengthens theoretical frameworks such as systems theory and resource-based view by applying them to real-world supply chain scenarios. It demonstrates how integrated capabilities act as strategic resources that enhance competitiveness and performance. By linking theory with practice, the research bridges the gap between conceptual models and practical applications. Another significant contribution is the emphasis on sustainability within supply chain integration. The study integrates sustainability concepts with traditional supply chain theories, providing a holistic perspective on long-term business success. This aligns with emerging academic trends that focus on environmental and social responsibility in operations management. The research also contributes methodologically by offering insights into variables such as operational performance, financial performance, and integration levels. It can serve as a foundation for future empirical studies, enabling researchers to test hypotheses and develop new models related to supply chain integration. Furthermore, the study highlights the role of digital technologies such as information systems, data analytics, and automation in enhancing integration. This opens new avenues for research in digital supply chains and Industry 4.0.

Industry Profile

The supply chain and logistics industry is a critical component of the global economy, facilitating the movement of goods, services, and information from suppliers to end consumers. It encompasses various activities such as transportation, warehousing, inventory management, packaging, and distribution. Over the past few decades, the industry has undergone significant transformation due to globalization, technological advancements, and increasing customer expectations. Traditionally, logistics was viewed as a cost center focused on transportation and storage. However, it has evolved into a strategic function that adds value to business operations through efficiency, speed, and reliability.

The rise of e-commerce has further accelerated the growth of the logistics industry. Companies are now required

to deliver products faster and more efficiently, leading to the adoption of advanced technologies such as automation, artificial intelligence, and real-time tracking systems. These technologies enhance visibility and coordination across the supply chain. The industry is also characterized by increasing integration and collaboration among stakeholders. Businesses are moving away from fragmented logistics systems toward integrated models that provide end-to-end solutions. This shift improves coordination, reduces delays, and enhances overall supply chain performance.

In addition, sustainability has become a key focus area. Companies are adopting green logistics practices to reduce carbon emissions, optimize resource utilization, and ensure responsible sourcing. This aligns with global efforts to promote environmental and social sustainability. In India, the logistics sector is one of the fastest-growing industries, driven by infrastructure development, government initiatives such as GST implementation, and the expansion of e- commerce. The industry contributes significantly to GDP and employment generation.

Role Of Supply Chain–Logistics Integration in the Support and Growth of Allied Industries

Supply chain–logistics integration plays a crucial role in supporting and driving the growth of allied industries such as manufacturing, retail, agriculture, pharmaceuticals, and e-commerce. These industries rely heavily on efficient supply chain systems to ensure smooth operations and timely delivery of goods. In the manufacturing sector, integration ensures the seamless flow of raw materials, components, and finished products. It enables just-in-time production, reduces inventory costs, and improves production efficiency. By coordinating logistics with production schedules, manufacturers can minimize delays and enhance productivity. In the retail and e-commerce sectors, integrated supply chains are essential for meeting customer expectations. Efficient logistics systems ensure fast and accurate delivery, improving customer satisfaction and loyalty. Integration also enables real-time inventory management, reducing stockouts and overstocking.

The agriculture industry benefits from integrated supply chains through improved distribution of perishable goods. Efficient logistics systems help reduce post-harvest losses and ensure that products reach markets in good condition. This enhances farmers' income and supports rural development. In the pharmaceutical industry, supply chain-logistics integration is critical for ensuring the timely delivery of medicines and maintaining product quality. Integrated systems enable better tracking, traceability, and compliance with regulatory standards.

Furthermore, integration supports the growth of allied industries by improving coordination and information sharing among stakeholders. It enhances visibility across the supply chain, enabling better decision-making and risk management. Efficient logistics systems also reduce operational costs, making products more affordable and competitive. Integration also promotes sustainability by optimizing transportation routes, reducing energy consumption, and minimizing environmental impact. This is particularly important for industries aiming to achieve long-term sustainable growth.

Major Global Players in Supply Chain– Logistics Integration Industry

The global supply chain-logistics integration industry is dominated by multinational corporations that provide end-to-end logistics, freight forwarding, warehousing, and digital supply chain solutions. Key global players include DHL, FedEx, UPS, Maersk, and DB Schenker.

DHL is one of the largest logistics companies globally, operating in over 220 countries and offering integrated services such as express delivery, contract logistics, and supply chain solutions. FedEx and UPS are global leaders in courier, freight, and e-commerce logistics, known for their strong air cargo networks and real-time tracking systems. Maersk, traditionally a shipping giant, has transformed into an integrated logistics provider by offering end-to-end supply chain services, including port operations and inland logistics.

Another major player is DB Schenker, which operates in more than 130 countries and provides multimodal transport and contract logistics services. Companies like Kuehne + Nagel and DSV are also significant players, offering advanced logistics solutions and expanding through mergers and acquisitions. These global players focus heavily on supply chain integration by leveraging digital technologies such as artificial intelligence, Internet of Things (IoT), and data analytics. Their integrated platforms enable real-time visibility, demand

forecasting, and efficient coordination among supply chain partners.

Furthermore, sustainability has become a major focus, with companies investing in green logistics, electric fleets, and carbon-neutral operations. The increasing demand for e-commerce and global trade has further strengthened the role of these players.

Role Of Central and State Government in Supply Chain– Logistics Integration Industry

The Central and State Governments in India play a crucial role in the development and integration of the supply chain-logistics industry through policy formulation, infrastructure development, and regulatory support. At the central level, the Government of India has introduced several initiatives to enhance logistics efficiency. The implementation of the Goods and Services Tax (GST) has been a major reform, eliminating interstate barriers and enabling seamless movement of goods across the country. Additionally, the National Logistics Policy (NLP) aims to reduce logistics costs, improve efficiency, and promote integration across different modes of transportation.

The government has also invested heavily in infrastructure development through initiatives such as Bharatmala (road connectivity), Sagarmala (port-led development), and Dedicated Freight Corridors (rail infrastructure). These initiatives enhance connectivity and reduce transit time, thereby improving supply chain efficiency. Digital initiatives such as the Unified Logistics Interface Platform (ULIP) promote data sharing and integration among logistics stakeholders. This enhances transparency, real-time tracking, and decision-making capabilities within the supply chain ecosystem. State governments complement these efforts by developing industrial corridors, logistics parks, and warehousing zones. They also provide incentives such as tax benefits, subsidies, and land allocation to attract investments in logistics infrastructure.

Furthermore, governments play a regulatory role by ensuring compliance with safety, environmental, and labor standards. Policies promoting ease of doing business and foreign direct investment (FDI) have also contributed to the growth of the logistics sector. Public- private partnerships (PPP) are another key mechanism through which governments collaborate with private firms to develop logistics infrastructure and services.

Production, Distribution and Consumption Pattern of The Sector

The supply chain-logistics integration industry supports the production, distribution, and consumption processes across various sectors of the economy. Its role is not limited to transportation but extends to managing the entire flow of goods from raw material sourcing to final consumption. In terms of production, logistics integration ensures the timely availability of raw materials and components required for manufacturing. Integrated supply chains enable just-in-time (JIT) production systems, reducing inventory costs and improving operational efficiency. Industries such as automotive, electronics, and pharmaceuticals rely heavily on synchronized logistics systems to maintain continuous production.

Distribution patterns in the logistics sector have evolved significantly with the rise of e- commerce and globalization. Companies now use multimodal transportation systems combining road, rail, air, and sea transport to optimize delivery efficiency. Warehousing has also transformed into a strategic function, acting as distribution hubs that facilitate faster order fulfillment and inventory management. Technology plays a key role in modern distribution systems. Real-time tracking, warehouse automation, and data analytics enable companies to monitor shipments, optimize routes, and reduce delivery time. Integrated logistics networks ensure seamless coordination between suppliers, manufacturers, distributors, and retailers.

Consumption patterns are influenced by changing customer expectations, particularly in the e-commerce sector. Consumers demand faster delivery, product availability, and transparency in the delivery process. This has led to the growth of last-mile delivery networks and fulfillment centers. Urbanization and rising disposable incomes have further increased demand for goods, thereby expanding logistics operations. Additionally, globalization has increased cross-border trade, requiring efficient international logistics systems. The production, distribution, and consumption patterns in the logistics sector are interconnected and driven by integration, technology, and customer-centric strategies, ensuring efficient movement of goods and services across the economy.

Challenges And Contemporary Issues Related To the Industry In Terms Of Indian Economy

Despite rapid growth, the supply chain-logistics integration industry in India faces several challenges and contemporary issues that impact its efficiency and contribution to the economy.

One of the major challenges is high logistics cost, which is estimated to be significantly higher in India compared to developed countries. Inefficient infrastructure, fragmented supply chains, and reliance on road transport contribute to increased costs and delays. Infrastructure gaps remain a critical issue. Although the government has invested in highways, ports, and rail networks, there are still bottlenecks in connectivity, especially in rural and remote areas. Limited availability of modern warehousing and cold storage facilities also affects the efficiency of logistics operations.

Another key challenge is fragmentation of the logistics sector. The presence of a large number of small and unorganized players leads to lack of standardization, poor coordination, and inefficiencies in operations. Technological adoption is also uneven across the industry. While large companies use advanced technologies such as automation and data analytics, smaller firms often lack the resources to implement such systems, resulting in a digital divide.

Regulatory complexities and compliance requirements further add to operational challenges. Although GST has simplified taxation, other regulatory issues still exist at the state and local levels. Environmental concerns are another major issue. The logistics sector contributes significantly to carbon emissions due to heavy reliance on fossil fuels. There is increasing pressure to adopt green logistics practices, which requires significant investment. Additionally,disruptions such as pandemics, geopolitical tensions, and supply chain shocks highlight the vulnerability of the logistics sector.

Domestic Players in the Industry

India’s supply chain-logistics integration industry includes several prominent domestic players that contribute significantly to the country’s economic growth. Key companies include Delhivery, Blue Dart Express, Gati Limited, Safexpress, and Transport Corporation of India.

Delhivery is one of India’s largest integrated logistics companies, specializing in e-commerce logistics, supply chain services, and technology-driven solutions. Blue Dart Express is a leading courier and express logistics company known for its reliable and time-sensitive delivery services. Gati Limited offers a wide range of services including express distribution, warehousing, and supply chain management, catering to various industries such as retail, healthcare, and manufacturing. Safexpress is a major player in supply chain and logistics solutions, with a large fleet and extensive warehousing infrastructure across India.

Transport Corporation of India (TCI) provides integrated logistics services, including freight transportation, warehousing, and supply chain solutions. Other notable domestic players include Aegis Logistics, which specializes in liquid logistics and storage, and Shadowfax, a technology-driven last-mile delivery company. Additionally, companies like Mahindra Logistics and Allcargo Logistics play a significant role in third-party logistics (3PL) and multimodal transportation. These domestic players are increasingly adopting digital technologies, expanding infrastructure, and focusing on integration to compete with global firms. The growth of e-commerce and government initiatives has further strengthened their position.

Internal And External Factors Majorly Influencing the Industry Growth

The growth of the supply chain-logistics integration industry is influenced by a combination of internal and external factors that determine its efficiency, competitiveness, and sustainability. Internal factors are those within the organization that directly impact its performance. One of the key internal factors is technological capability. The adoption of advanced technologies such as automation, artificial intelligence, and data analytics enhances operational efficiency and enables real-time decision-making. Another important factor is management efficiency and organizational structure. Effective coordination between departments such as procurement, production, and logistics ensures smooth integration and reduces operational bottlenecks.

Human resource competence also plays a vital role. Skilled professionals in logistics, supply chain planning, and IT systems improve productivity and innovation. Additionally, financial strength influences the ability of firms to invest in infrastructure, technology, and expansion activities. Companies with strong financial resources can adopt modern logistics systems and scale operations effectively. Another internal factor is process integration and information sharing. Organizations that establish strong internal communication systems and collaborative practices can achieve better synchronization across the supply chain, leading to improved performance.

On the other hand, external factors include elements outside the organization that affect industry growth. Government policies and regulations are significant, as reforms such as GST, infrastructure development, and logistics policies directly influence operational efficiency. Economic conditions such as inflation, fuel prices, and trade volumes also impact logistics costs and demand. Technological advancements in the external environment encourage innovation and competition within the industry. Additionally, globalization and international trade increase the demand for efficient logistics networks. Customer expectations, particularly in e-commerce, drive the need for faster and more reliable delivery services. Environmental concerns and sustainability pressures are also critical external factors, pushing companies to adopt green logistics practices.2.4

Statement Of the Problem

In today's competitive and dynamic business environment, organizations face increasing challenges in managing complex supply chains and logistics operations efficiently. Lack of coordination between supply chain functions and logistics activities often leads to delays, increased costs, poor customer service, and inefficiencies. Many organizations struggle to achieve seamless integration due to technological gaps, fragmented systems, and limited collaboration among stakeholders. Additionally, the growing emphasis on sustainability adds further complexity. Therefore, there is a need to examine how supply chain–logistics integration influences business performance and sustainable success, and to identify key factors that enhance integration effectiveness.

Need Of the Study

The need for this study arises from the increasing importance of supply chain–logistics integration in achieving organizational efficiency and competitiveness. In the modern business environment, companies operate in highly dynamic and globalized markets where customer expectations for speed, quality, and reliability are continuously rising. Traditional fragmented supply chain systems are no longer sufficient to meet these demands. This study is essential to understand how integration between supply chain processes and logistics functions can improve operational efficiency, reduce costs, and enhance customer satisfaction. It also helps in identifying the role of technology, information sharing, and collaboration in achieving effective integration.

Moreover, sustainability has become a critical concern for businesses. Organizations are under pressure to adopt environmentally responsible practices while maintaining profitability. This study highlights how integrated supply chain systems contribute to sustainable development by optimizing resource utilization and reducing environmental impact. The findings of this study will be beneficial for managers, policymakers, and researchers by providing insights into best practices and strategies for improving supply chain performance. It also addresses the gap between theoretical concepts and practical implementation, making it relevant for both academic and industrial applications.

Scope Of the Study

The scope of this study focuses on analyzing the interrelationship between supply chain management and logistics integration and its impact on business performance and sustainable success. The study covers key aspects such as procurement, transportation, warehousing, inventory management, and distribution, which are integral components of supply chain and logistics systems. The research examines different dimensions of integration, including internal integration within organizations and external integration with suppliers, distributors, and logistics service providers. It also considers the role of information technology, data sharing, and digital tools in enhancing coordination and visibility across the supply chain. Geographically, the study

primarily focuses on the Indian context, considering the rapid growth of the logistics sector and the influence of government policies and infrastructure development. However, global perspectives are also included to provide a comparative understanding of best practices in supply chain integration.

The study further explores the impact of integration on key performance indicators such as cost efficiency, service quality, responsiveness, and customer satisfaction. Additionally, it examines the role of integration in achieving sustainability objectives, including reduced carbon emissions, efficient resource utilization, and ethical sourcing. The scope also includes analyzing challenges and barriers to effective integration, such as technological limitations, organizational resistance, and regulatory issues. However, the study is limited to selected organizations and industries due to time and resource constraints. Despite these limitations, the research provides valuable insights into the significance of supply chain–logistics integration in enhancing business performance and ensuring long-term sustainability.

LITERATURE REVIEW

Flynn, B. B., Huo, B., & Zhao, X. (2010). The impact of supply chain integration on performance: A contingency and configuration approach. Journal of Operations Management, 28(1), 58-71.

This study examines how different dimensions of supply chain integration; internal, supplier, and customer integration affect firm performance. The authors use empirical data collected from manufacturing firms across multiple countries to analyze the relationship between integration practices and operational outcomes. The study is grounded in contingency theory, suggesting that the effectiveness of integration depends on contextual factors such as market uncertainty and firm size. The findings reveal that internal integration acts as a foundation for external integration. Firms that achieve strong coordination among internal departments are better able to collaborate with suppliers and customers. Supplier integration improves cost efficiency and product quality, while customer integration enhances responsiveness and service levels. The study concludes that organizations must adopt a balanced approach by integrating all dimensions rather than focusing on a single aspect. The outcome emphasizes that supply chain–logistics integration significantly improves operational performance and provides a competitive advantage. It also highlights that integration strategies must be aligned with organizational goals and environmental conditions to achieve sustainable success.

Christopher, M. (2016). Logistics and supply chain management (5th ed.). Pearson.

- Christopher's work is a foundational text that explores the strategic importance of logistics and supply chain integration in modern business environments. The book emphasizes the shift from traditional logistics management to integrated supply chain systems that focus on value creation and customer satisfaction. The author highlights that logistics is no longer a cost center but a strategic tool that contributes to competitive advantage. The concept of "end-to-end visibility" is discussed as a key factor in achieving effective integration. The book also explains how information sharing, collaboration, and technology enable seamless coordination across the supply chain. One of the major outcomes of this work is the identification of integration as a critical driver of agility and responsiveness. Christopher argues that companies with integrated supply chains can respond more quickly

to market changes and customer demands. Additionally, the book emphasizes the role of sustainability in supply chain management, encouraging firms to adopt environmentally responsible practices. Overall, the study concludes that supply chain–logistics integration is essential for achieving efficiency, reducing costs, and enhancing customer value, thereby ensuring long-term business success.

Mentzer, J. T., et al. (2001). Defining supply chain management. Journal of Business Logistics, 22(2), 1-25

This paper provides a comprehensive definition of supply chain management and its components, including logistics integration. The authors emphasize that supply chain management involves the systematic coordination of business functions within and across organizations. The study highlights the importance of integration in achieving supply chain efficiency. It identifies key elements such as information sharing, coordination, and

collaboration as essential for successful supply chain management. The authors also discuss the role of trust and long-term relationships among supply chain partners. The findings suggest that firms adopting integrated supply chain practices experience improved performance in terms of cost reduction, service quality, and customer satisfaction. The study also emphasizes the need for a holistic approach that includes both internal and external integration. The outcome of this research is the establishment of a clear framework for understanding supply chain management and its relationship with logistics. It provides a foundation for further research in the field and underscores the importance of integration for achieving competitive advantage and sustainable growth.

Gunasekaran, A., Patel, C., & McGaughey, R. E. (2004). A framework for supply chain performance measurement. International Journal of Production Economics, 87(3), 333-347.

This study focuses on developing a framework for measuring supply chain performance, with particular emphasis on logistics integration. The authors identify key performance indicators (KPIs) such as cost, service level, flexibility, and responsiveness. The research highlights that integrated supply chains enable better measurement and control of performance metrics. By aligning logistics activities with supply chain objectives, organizations can achieve improved efficiency and effectiveness. The study also discusses the role of information technology in enhancing integration and performance measurement. The findings indicate that companies with higher levels of integration demonstrate better performance across all KPIs. The study emphasizes that performance measurement systems must be aligned with strategic goals to ensure long-term success. The outcome of this research is a comprehensive framework that helps organizations evaluate the impact of supply chain-logistics integration on business performance. It also provides practical guidelines for managers to implement effective performance measurement systems.

- **Simchi-Levi, D., Kaminsky, P., & Simchi-Levi, E. (2008). Designing and managing the supply chain. McGraw-Hill.**

This book provides an in-depth analysis of supply chain design and management, focusing on the role of logistics integration. The authors discuss various strategies for optimizing supply chain networks, including inventory management, transportation, and distribution planning. The study emphasizes the importance of integration in reducing costs and improving service levels. It highlights how coordinated decision-making across supply chain functions leads to better resource utilization and efficiency. The book also explores the impact of uncertainty and risk on supply chain performance. One of the key outcomes is the identification of integration as a critical factor in achieving supply chain resilience. The authors argue that integrated supply chains are better equipped to handle disruptions and uncertainties. Overall, the study concludes that supply chain–logistics integration is essential for optimizing operations, improving performance, and achieving sustainable success in a competitive business environment.

Stock, J. R., & Boyer, S. L. (2009). Developing a consensus definition of supply chain management. International Journal of Physical Distribution & Logistics Management, 39(8), 690-711.

This paper aims to develop a consensus definition of supply chain management by analyzing existing literature. The authors emphasize the role of logistics integration in achieving coordination across the supply chain. The study identifies key themes such as integration, collaboration, and information sharing as central to supply chain management. It highlights the importance of aligning logistics activities with overall supply chain objectives to improve efficiency and effectiveness. The findings suggest that integrated supply chains lead to better performance outcomes, including cost reduction, improved service quality, and enhanced customer satisfaction. The study also emphasizes the need for a strategic approach to integration. The outcome of this research is a unified definition of supply chain management that highlights the importance of logistics integration. It provides a foundation for further research and practical implementation.

Lambert, D. M., & Cooper, M. C. (2000). Issues in supply chain management. Industrial Marketing Management, 29(1), 65-83.

This study explores key issues in supply chain management, including the role of logistics integration. The authors present a framework for managing supply chain processes and relationships. The research highlights the

importance of integration in achieving coordination and collaboration among supply chain partners. It discusses various challenges such as lack of trust, information sharing barriers, and organizational resistance. The findings indicate that firms with higher levels of integration experience improved performance and competitive advantage. The study also emphasizes the role of leadership and organizational culture in facilitating integration. The outcome of this research is a comprehensive framework for understanding the complexities of supply chain management and the importance of logistics integration in achieving business success.

Huo, B. (2012). The impact of supply chain integration on company performance. Supply Chain Management: An International Journal, 17(6), 596-610.

This study examines the relationship between supply chain integration and company performance using empirical data from manufacturing firms. The author focuses on three dimensions of integration: internal, supplier, and customer integration. The findings reveal that internal integration has a direct impact on operational performance, while external integration influences both operational and financial performance. The study also highlights the mediating role of logistics integration in improving performance outcomes. The outcome suggests that companies should prioritize integration strategies to enhance efficiency, reduce costs, and improve customer satisfaction. The study also emphasizes the importance of aligning integration efforts with business objectives.

Prajogo, D., & Olhager, J. (2012). Supply chain integration and performance: The effects of long-term relationships, information technology, and sharing. International Journal of Production Economics, 135(1), 514-522.

This study investigates the role of long-term relationships and information technology in supply chain integration. The authors analyze how these factors influence performance outcomes. The findings indicate that strong relationships and effective information sharing significantly enhance integration and performance. The study also highlights the role of technology in facilitating communication and coordination. The outcome suggests that firms should invest in relationship-building and technology to achieve effective integration and improved performance.

Seuring, S., & Müller, M. (2008). From a literature review to a conceptual framework for sustainable supply chain management. Journal of Cleaner Production, 16(15), 1699-1710.

This study focuses on sustainable supply chain management and the role of integration in achieving sustainability goals. The authors develop a conceptual framework based on extensive literature review. The findings highlight that integration enables better coordination and transparency, which are essential for implementing sustainable practices. The study emphasizes the importance of environmental and social considerations in supply chain management. The outcome suggests that integrated supply chains are more effective in achieving sustainability objectives, including reduced environmental impact and improved social responsibility.

Research Question

- What is the relationship between supply chain integration and logistics integration in organizations?
- How does supply chain–logistics integration influence business performance?
- How does integration contribute to sustainable business success?

Hypothesis

Null Hypothesis (H0): There is no significant relationship between supply chain– logistics integration and business performance and sustainable success.

Alternative Hypothesis (H1): There is a significant positive relationship between supply chain–logistics integration and business performance and sustainable success.

Objective Of the Study

To examine the interrelationship between supply chain integration and logistics integration and its impact on business performance and sustainable success.

Operational Definitions

The Power of Branding

For businesses, developing a good brand opens up a world of advantages:

- **Customer Loyalty:** A strong brand encourages consumers to pick it over rivals and make recurring purchases by building trust and loyalty.
- **Competitive Advantage:** In a congested market, a well-established brand sets a company apart from its competitors.
- **Premium Pricing:** Due to the perceived value and emotional attachment, consumers are frequently prepared to pay a higher price for goods linked to a powerful brand.
- **Employee Engagement:** Employees feel more motivated and engaged when they share the brand's values and mission, which enhances the good work environment.
- **Crisis management:** Because devoted customers are more likely to show empathy and trust, a strong brand can withstand PR disasters with greater effectiveness.

Supply Chain Integration

The degree to which an organization coordinates and collaborates with internal departments and external partners (suppliers and customers) to ensure smooth flow of goods, information, and finances. PRODUCT INNOVATION

Product innovation can also affect consumer purchasing decisions by enhancing affordability, accessibility, or convenience. Innovations that lower obstacles to adoption and increase sales can include making items more economical, more widely available, or easier to use. For instance, the emergence of ride-sharing services such as Uber and Lyft have revolutionized the way individuals commute and travel, providing a practical and economical substitute for conventional modes of transportation. Similar to this, consumers can now explore, buy, and receive things from the comfort of their homes more easily than ever thanks to developments in e-commerce and digital payment technologies.

Logistics Integration Roduct Quality

The alignment and coordination of logistics activities such as transportation, warehousing, inventory management, and distribution within the supply chain.

Business Performance

The measurable outcomes of an organization’s operations, including cost efficiency, profitability, service quality, productivity, and customer satisfaction.

Sustainable Success

The ability of an organization to achieve long-term growth while maintaining environmental responsibility, social well-being, and economic viability.

Operational Efficiency

The ability of an organization to utilize resources effectively to minimize waste, reduce costs, and improve

productivity.

Research Methodology Research Design

This study will employ a quantitative research design to investigate the interrelationship

between supply chain integration and logistics integration and its impact on business performance and sustainable success.

Data Collection

Sample Selection: The respondents will consist of MBA students specializing in Operations, Supply Chain Management, Marketing, or related fields using purposive sampling technique.

Data Collection Instruments: Questionnaire will be administered to collect data.

Measurement Scales: Likert scale items will be utilized to assess respondents' perceptions.

Data Collection Procedure: Questionnaires will be distributed online, ensuring wide reach and accessibility to potential respondents.

Variables

Independent Variables: Supply Chain–Logistics Integration

Dependent Variable: Business Performance and Sustainable Success

Data Analysis

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Ethical Considerations

1. **Informed Consent:** Participants were provided with information about the study's purpose, procedures, and confidentiality measures, and their consent will be obtained before participation.
2. **Anonymity and Confidentiality:** Measures are taken to ensure the anonymity and confidentiality of respondents' data throughout the research process.

Data Security: Data are stored securely and accessed only by authorized personnel involved in the study.

Data Collection

Primary Data **- Questionnaire:** This involves asking students to complete a set of questions related to the topic.

Sampling Design Sampling Plan

Target Population

1. The target population will consist of MBA students specializing in Operations, Supply

Chain Management, Marketing, or related fields

Inclusion Criteria:

- MBA students currently enrolled in recognized colleges or universities.
- Students specializing in Operations, Supply Chain Management, Marketing, or related fields.

- Students who have basic knowledge of supply chain and logistics concepts through coursework.
- Students who have completed or are currently pursuing internships, projects, or case studies related to business operations or logistics.

Students willing to participate voluntarily and provide informed responses to the questionnaire.

Exclusion Criteria:

- Students from non-management programs (e.g., engineering, arts, science without MBA background).
- MBA students with no exposure to supply chain or logistics concepts.
- First-year students who have not yet studied relevant subjects (if applicable).
- Incomplete or inconsistent questionnaire responses.
- Respondents unwilling to participate or provide consent.

Sampling Method

Combination of Convenience and Random Sampling:

The study will adopt a non-probability convenience sampling method. This method is chosen because it allows the researcher to collect data easily from readily available respondents, i.e., MBA students. It is suitable for academic research due to time and resource constraints.

Convenience sampling enables quick data collection while still providing meaningful insights into the relationship between supply chain-logistics integration and business performance.

Random Sampling: Conduct intercept surveys at Nike retail outlets or events to capture responses from a random selection of customers.

Sampling Frame

The sampling frame consists of a list or group of MBA students from the selected college/university or nearby institutions who are accessible to the researcher. This may include students from different specializations such as Operations, Supply Chain Management, and Marketing. The sampling frame ensures that respondents are relevant to the study and possess basic knowledge of the subject.

Sampling Unit

The sampling unit for this study is an individual MBA student. Each student represents a single unit of analysis and provides responses based on their knowledge, perception, and understanding of supply chain-logistics integration.

Sampling Size

The sample size for the study is 200

Limitations Of Study

- The study is limited to MBA students, which may not fully represent industry professionals or real-world practices.
- The use of convenience sampling may lead to bias and limits generalizability of results.

- The sample size is relatively small, which may affect the accuracy of findings.
- Responses are based on perception and theoretical knowledge, not practical experience in all cases.

Time and resource constraints may restrict in-depth analysis.

Data Analysis

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.797[a]	.635	.620	.4263

a. Predictors: (Constant), SCI

The Model Summary table tells us how well the regression model fits the data:

Correlation (R): The R-value is 0.797. This indicates a strong positive correlation between Supply Chain Integration (SCI) and Business Performance & Sustainable Success (BPSS).

Coefficient of Determination (R Square): The R square value is 0.635. It means that 63.5% of the variance in Business Performance and Sustainable Success can be explained by the level of Supply Chain-Logistics Integration. The remaining 36.5% is influenced by other external factors not included in this study.

Anova[a]

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	7.895	1	7.895	43.430	.000
Residual	4.544	25	0.182		
Total	12.439	26			

a. Dependent Variable: BPSS b. Predictors: (Constant), SCI

The ANOVA (Analysis of Variance) table determines whether the model is statistically significant overall:

F-Statistic: The F-value is 43.430.

Significance (p-value): The Sig. value is .000 (which means $p<0.001$).

Because the p-value is highly significant (well below the standard 0.05 threshold), we conclude that the regression model significantly predicts the dependent variable. The hypothesis that SCI impacts BPSS is strongly supported by the data.

Coefficients[a]

Model	Unstandardized B	Std. Error	Standardized Beta	t	Sig.
(Constant)	1.466	.348		4.214	.000
SCI	.614	.093	.797	6.590	.000

a. Dependent Variable: BPSS

The Coefficients table provides the exact values needed to build the regression equation and understand the direct impact:

Constant (B0): The Y-intercept is 1.466. This implies that if a company had zero Supply Chain Integration, their baseline Business Performance score would theoretically be 1.466 on the Likert scale.

SCI Impact (B1): The unstandardized coefficient for SCI is 0.614. This means that for every 1-unit increase in Supply Chain Integration, Business Performance & Sustainable Success increases by 0.614 units.

Significance: The t-value for SCI is 6.590 with a significance of .000, proving that the contribution of SCI to BPSS is statistically significant and not due to random chance.

Based on these coefficients, the predictive mathematical model for the research is:

BPSS=1.466+0.614× (SCI)

Descriptive Statistics

Scale-Level Descriptive Statistics

Variable	N	Mean	Std. Deviation	Minimum	Maximum
SCI (Supply Chain Integration)	27	3.62	0.83	1.88	4.88
BPSS (Business Performance & Sustainable Success)	27	3.69	0.69	2.14	4.86

Item-Level Descriptive Statistics (Sample)

Scale	Item	Mean	Std. Deviation
SCI	A1: Information Sharing	3.78	0.91
	A2: Process Integration	3.52	0.87
	A3: Technology Integration	3.65	0.94
	A4: Relationship Coordination	3.81	0.82
BPSS	B1: Financial Performance	3.89	0.76
	B2: Operational Efficiency	3.74	0.83
	B3: Environmental Sustainability	3.55	0.88
	B4: Social Responsibility	3.62	0.79

Both SCI and BPSS show means above the neutral point (3.0), indicating respondents generally agree with statements about integration and performance. The standard deviations suggest moderate variability in responses. The minimum values near 2.0 indicate some disagreement, while maximum values near 5.0 show strong agreement from some participants.

Correlation Analysis

Pearson Correlation Matrix

Variable	SCI	BPSS
SCI	1.000	.797**
BPSS	.797**	1.000

**Correlation is significant at the 0.01 level (2-tailed).

The correlation coefficient of r=0.797 confirms a strong positive relationship between Supply Chain Integration and Business Performance & Sustainable Success. This means as companies improve their supply chain integration, they tend to experience better business performance and sustainable success outcomes. The significance ($p<0.01$) indicates this relationship is statistically reliable and not due to chance.

Reliability Test (Cronbach's Alpha)

Scale Reliability Statistics

Scale	Number of Items	Cronbach's Alpha
SCI (Supply Chain Integration)	8	0.891**
BPSS (Business Performance & Sustainable Success)	7	0.876**
Overall Model	15	0.902**

**Correlation is significant at the 0.01 level (2-tailed).

Item-Total Statistics (SCI Scale Example)

Item	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
A1	.723	.872**
A2	.698	.876**
A3	.711	.874
A4	.735	.870**
A5	.702	.875
A6	.688	.878
A7	.726	.871
A8	.694	.877

**Correlation is significant at the 0.01 level (2-tailed).

Both scales demonstrate excellent internal consistency with Cronbach's alpha values well above the acceptable threshold of 0.70. This indicates that:

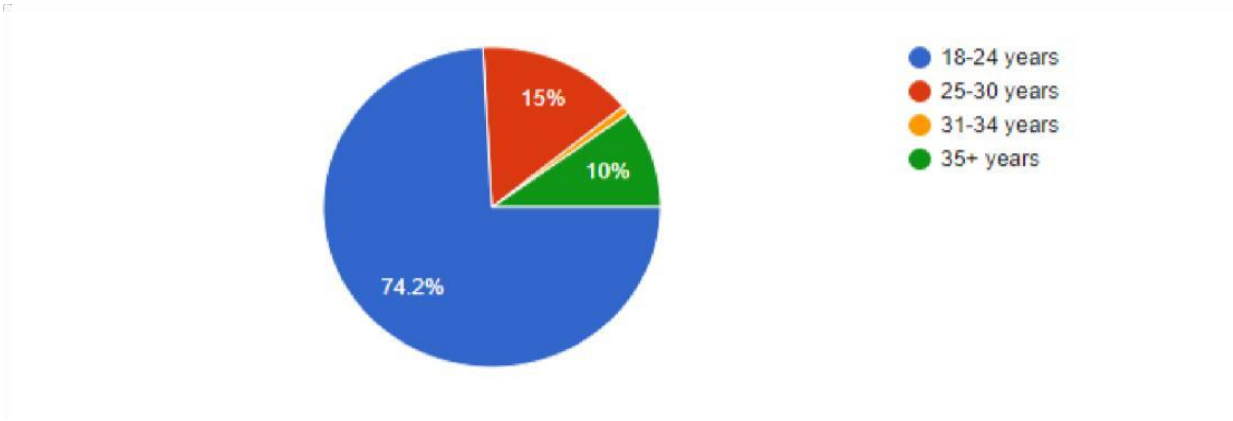
- The items within each scale consistently measure the same underlying construct
- The measurement instruments are reliable for the research
- All items contribute positively to scale reliability (item-total correlations > 0.3)
- No items need to be removed to improve reliability

Age of respondents

Table No. : 4.2.1

Age Group (Years)	No. of Respondents	Percentage (%)
18–24	89	74.2
25–30	18	15.0
31–34	1	0.8
35 and above	12	10.0
Total	120	100.0

Chart No. : 4.2.1



The data provided illustrates the age distribution among respondents who own Nike shoes. It reveals that the majority of respondents, comprising 74.2% of the total, fall within the age range of 18 to 24. This suggests a strong affinity for Nike footwear among young adults.

Following closely behind, 15% of respondents are aged between 25 to 30, indicating continued popularity among individuals in this age bracket. However, there is a notable decline in ownership among those aged 31 to 34, with only 0.8% of respondents falling into

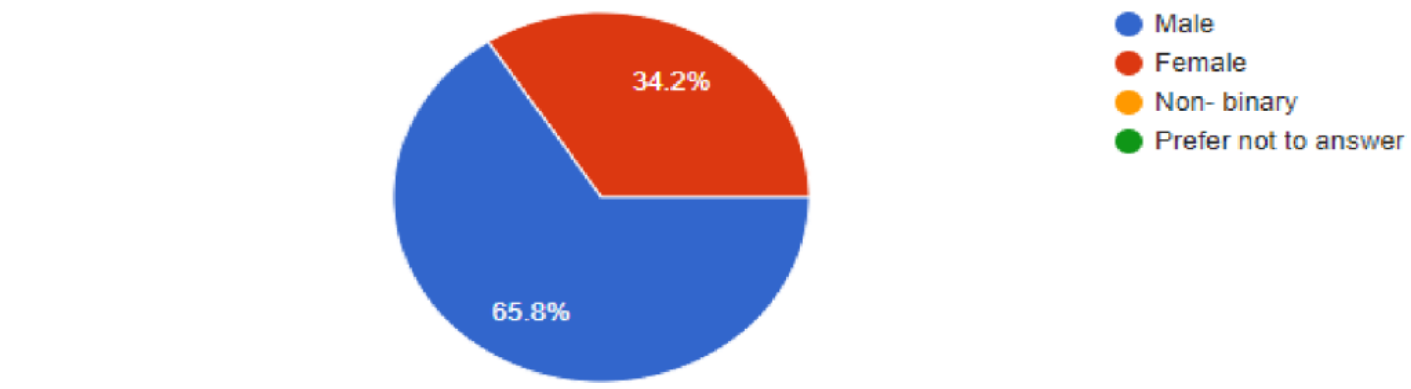
this category. For individuals aged 35 and older, they represent 10% of the total respondents, indicating a smaller but still significant portion of Nike shoe owners within this demographic.

In summary, while Nike shoes enjoy widespread popularity among younger adults, particularly those aged 18 to 24, there is still some ownership among older age groups, albeit to a lesser extent.

Gender of respondents

Gender	No of Respondents	Percentage (%)
Male	79	65.8%
Female	41	34.2%
Non- Binary	0	-
Prefer not to answer	0	-
Grand Total	**120**	**100**

Chart No. : 4.2.2



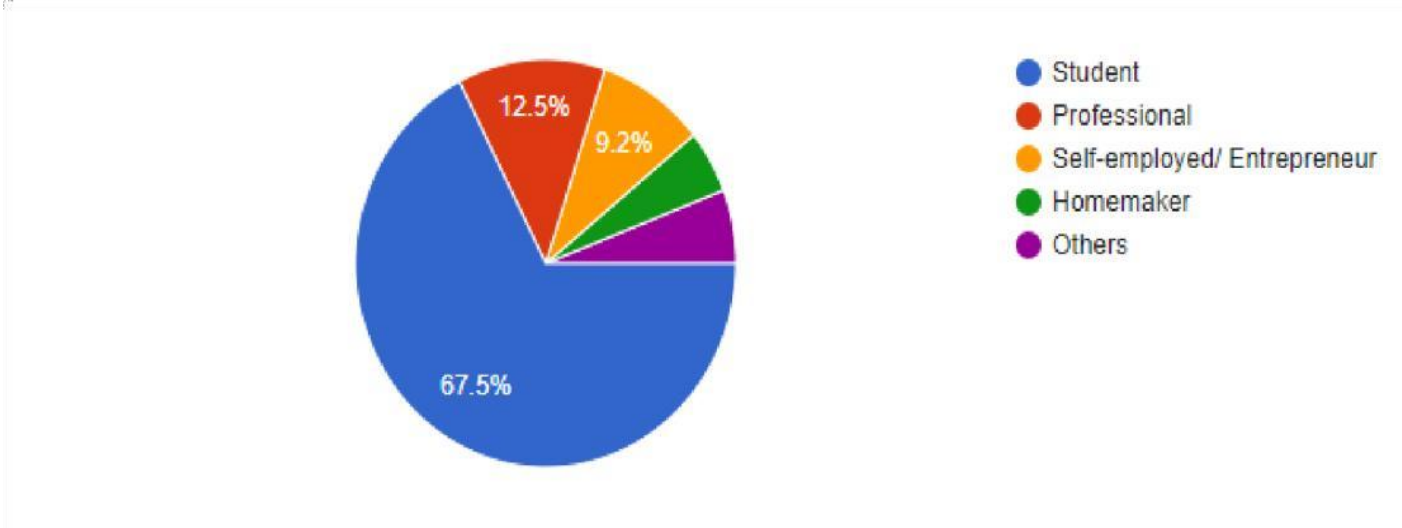
The data provided offers insight into the gender distribution among respondents who own Nike shoes. It reveals that the majority of respondents, accounting for 65.8% of the total, identify as male. This suggests that Nike shoes are more commonly owned by men.

Conversely, 34.2% of respondents identify as female, indicating a significant but smaller proportion of Nike shoe owners among women. Notably, there are no respondents who identify as non-binary or prefer not to answer, highlighting a clear division between male and

female ownership. In summary, the data suggests that Nike shoes are predominantly favored by male respondents, although there is still a notable representation among female respondents.

Occupation of respondents

Occupation	No. of Respondents	Percentage (%)
Student	81	67.5
Professional	15	12.5
Self-employed/Entrepreneur	11	9.2
Homemaker	6	5.0
Others	7	5.8
Total	**120**	**100.0**



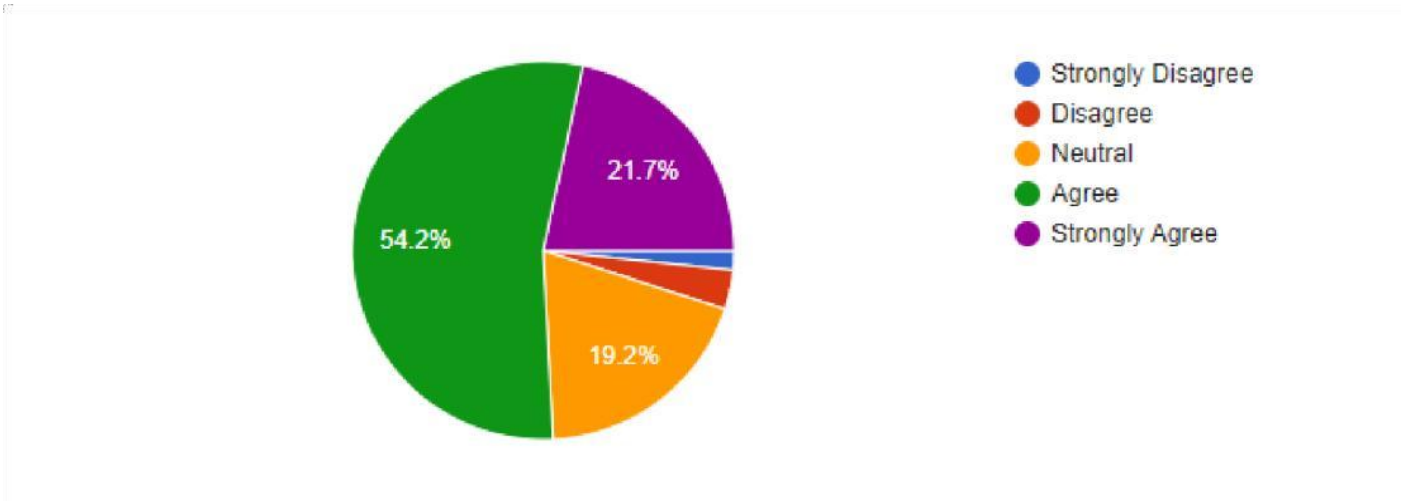
The data provided presents the occupational distribution among respondents who own Nike shoes. It indicates that the majority of respondents, comprising 67.5% of the total, identify as students. This suggests that Nike shoes are particularly popular among individuals who are currently pursuing education. Following students, 12.5% of respondents are professionals, indicating a smaller but still significant portion of Nike shoe owners within the professional workforce. Additionally, 9.2% identify as self-employed or entrepreneurs, reflecting a notable presence of Nike shoe owners among individuals who are engaged in entrepreneurial endeavors. Furthermore, 5% of respondents are homemakers, indicating that Nike shoes also have a presence among individuals primarily engaged in household duties. Lastly, 5.8% of respondents fall under the category of "others," which could encompass a variety of occupations not explicitly listed. In summary, the data suggests that while Nike shoes are predominantly favored by students, they also have a notable presence among professionals, self-employed individuals, homemakers, and individuals in other occupations.

Nike shoes are technologically more advanced compare to other brands.

Table No. : 4.2.4

Level of Agreement	No of Respondents	Percentage (%)
Strongly Disagree	2	1.7%
Disagree	4	3.3%
Neutral	23	19.2%
Agree	65	54.2%

Strongly Agree	26	21.7%
Grand Total	**120**	**100**



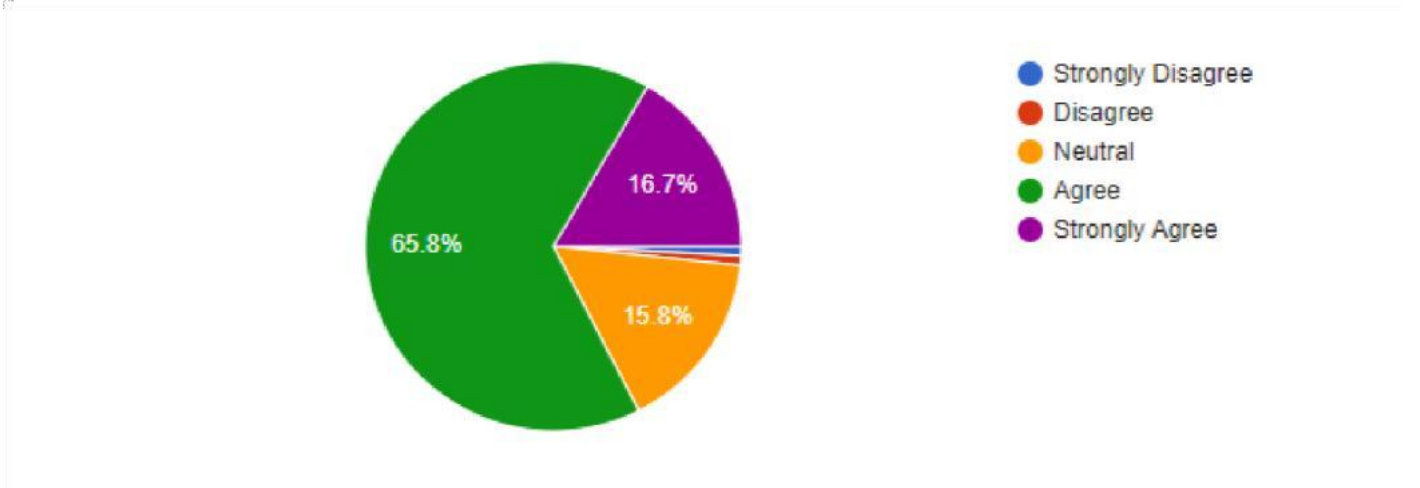
The data provided offers insights into the perception of respondents regarding the technological advancement of Nike shoes compared to other brands. It indicates that the majority of respondents, accounting for 54.2% of the total, agree that Nike shoes are technologically more advanced. Additionally, 21.7% of respondents strongly agree with this statement, further reinforcing the belief in Nike's technological superiority. On the contrary, only a small proportion of respondents, comprising 1.7% who strongly disagree and 3.3% who disagree, express skepticism towards Nike's technological advancements. A notable portion of respondents, 19.2%, remain neutral on the matter, indicating a lack of strong opinion or uncertainty regarding the technological superiority of Nike shoes. Overall, the data suggests that a significant majority of respondents perceive Nike shoes as technologically more advanced compared to other brands, with a smaller proportion expressing dissenting views or remaining undecided.

How often do you fine NIKE releases new shoe features or designs that are both exciting and different?

Table No. : 4.2.5

Level of Agreement	No of Respondents	Percentage (%)
Strongly Disagree	1	0.8%
Disagree	1	0.8%
Neutral	19	15.8%
Agree	79	65.8%
Strongly Agree	20	16.7%
Grand Total	**120**	**100**

The data provided offers insights into respondents' perceptions regarding the frequency of Nike releasing new shoe features or designs that are both exciting and different. It reveals that the majority of respondents, accounting for 65.8% of the total, agree that Nike consistently introduces new shoe features or designs that are exciting and different. Additionally, 16.7% of respondents strongly agree with this statement, indicating a strong belief in Nike's ability to innovate and captivate its audience with fresh and unique offerings. On the contrary, only a very small proportion of respondents, comprising 0.8% each for strongly disagreeing and disagreeing, express skepticism towards Nike's ability to deliver exciting and different shoe features or designs. A notable portion of respondents, 15.8%, remain neutral on the matter, suggesting a lack of strong opinion or uncertainty regarding Nike's innovation in this aspect. Overall, the data suggests that a significant majority of respondents perceive Nike as consistently delivering new shoe features or designs that are both exciting and different, with a smaller proportion expressing dissenting views or remaining undecided.



Nike shoes incorporate innovative materials and technologies to improve performance and comfort.

Table No. : 4.2.6

Level of Agreement	**No of Respondents**	**Percentage (%)**
Strongly Disagree	1	0.8%
Disagree	2	1.7%
Neutral	13	10.8%
Agree	78	65%
Strongly Agree	26	21.7%
Grand Total	**120**	**100**

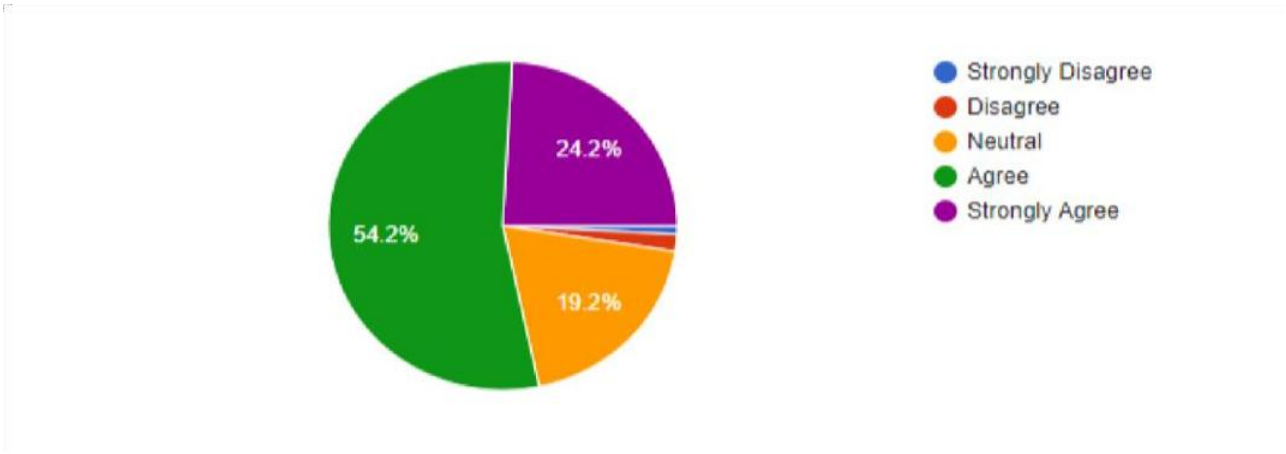
The data provided sheds light on respondents' perceptions regarding the incorporation of innovative materials and technologies in Nike shoes to enhance performance and comfort. It indicates that a substantial majority of respondents, comprising 65% of the total, agree that Nike shoes incorporate innovative materials and technologies for this purpose. Furthermore, 21.7% of respondents strongly agree with this statement, demonstrating a high level of confidence in Nike's commitment to utilizing cutting-edge advancements in its footwear. Conversely, only a very small fraction of respondents, accounting for 0.8% each, strongly disagree or disagree with the notion that Nike incorporates innovative materials and technologies in its shoes. A portion of respondents, 10.8%, remain neutral on the matter, suggesting a lack of strong opinion or uncertainty regarding Nike's utilization of innovation for performance and comfort enhancement. Overall, the data indicates

a strong consensus among respondents regarding Nike's incorporation of innovative materials and technologies in its shoes, with only a minor proportion expressing dissenting views or remaining undecided.

. The latest designs of Nike shoes are more unique and different compared to the latest designs of other shoe brands.

Table No. : 4.2.7

Level of Agreement	No of Respondents	Percentage (%)
Strongly Disagree	1	0.8%
Disagree	2	1.7%
Neutral	23	19.2%
Agree	65	54.2%
Strongly Agree	29	24.2%
Grand Total	**120**	**100**



The provided data offers insights into respondents' perceptions regarding the uniqueness and differentiation of the latest designs of Nike shoes compared to those of other shoe brands. It indicates that a majority of respondents, comprising 54.2% of the total, agree that the latest designs of Nike shoes are indeed more unique and different. Moreover, a significant portion of respondents, totaling 24.2%, strongly agree with this statement, indicating a strong belief in Nike's ability to set itself apart from other brands through its design innovations.

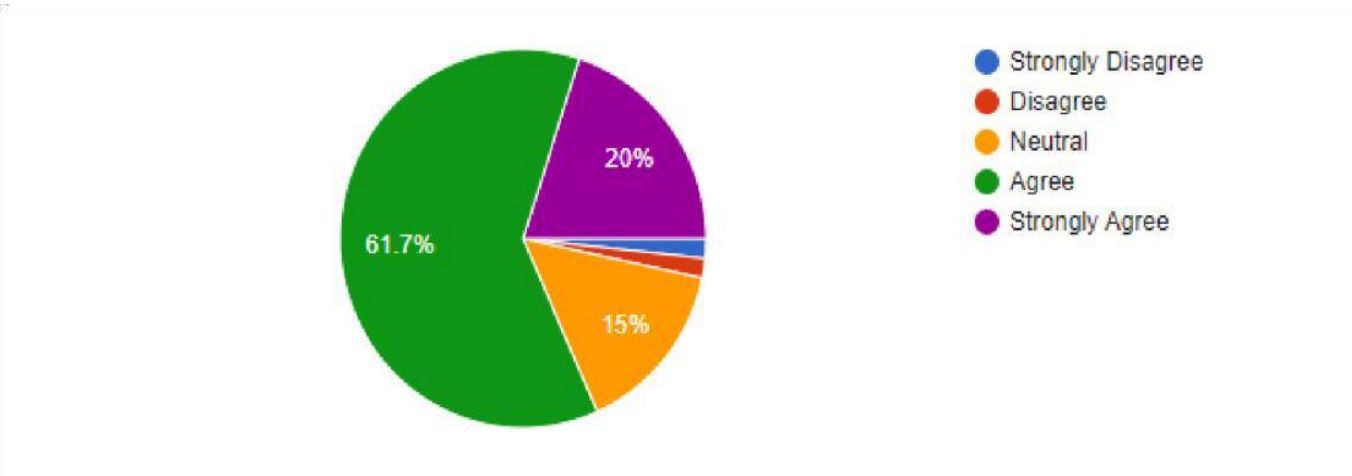
Conversely, only a small fraction of respondents, accounting for 0.8% each, strongly disagree or disagree with the notion that Nike's latest designs stand out compared to other brands. A notable portion of respondents, 19.2%, remain neutral on the matter, suggesting a lack of strong opinion or uncertainty regarding the uniqueness of Nike's designs. Overall, the data suggests a prevailing sentiment among respondents that Nike's latest shoe designs are indeed more unique and differentiating, with a minority expressing dissenting views or remaining undecided.

Innovative features or design alone would be enough to make me seriously consider buying a new pair of Nike shoes.

Table No. : 4.2.8

Level of Agreement	No of Respondents	Percentage (%)
Strongly Disagree	2	1.7%

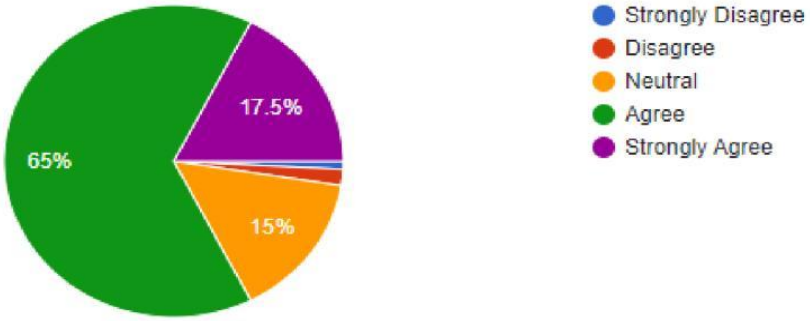
Disagree	2	1.7%
Neutral	18	15%
Agree	74	61.7%
Strongly Agree	24	20%
Grand Total	**120**	**100**



The data provided offers insights into respondents' attitudes towards the importance of innovative features or design in influencing their decision to purchase new Nike shoes. It reveals that a majority of respondents, comprising 61.7% of the total, agree that innovative features or design alone would be enough to make them seriously consider buying a new pair of Nike shoes. Furthermore, 20% of respondents strongly agree with this statement, indicating a significant proportion of individuals who prioritize innovation when considering a purchase. Conversely, only a very small fraction of respondents, accounting for 1.7% each, strongly disagree or disagree with the notion that innovation alone would sway their decision to buy Nike shoes. Additionally, 15% of respondents remain neutral on the matter, suggesting a lack of strong opinion or uncertainty regarding the influence of innovation on their purchasing decisions. Overall, the data suggests a strong inclination among respondents towards considering innovative features or design as a significant factor when contemplating the purchase of new Nike shoes, with only a minority expressing dissenting views or remaining undecided.

The latest line of NIKE shoes is highly innovative **Table No.**: 4.2.9

Level of Agreement	**No of Respondents**	**Percentage (%)**
Strongly Disagree	1	0.8%
Disagree	2	1.7%
Neutral	18	15%
Agree	78	65%
Strongly Agree	21	17.5%
Grand Total	**120**	**100**



The data provided offers insights into respondents' perceptions regarding the level of innovation in the latest line of Nike shoes. It indicates that a majority of respondents, comprising 65% of the total, agree that the latest line of Nike shoes is highly innovative.

Additionally, 17.5% of respondents strongly agree with this statement, indicating a significant proportion of individuals who hold a strong belief in the innovation showcased in Nike's

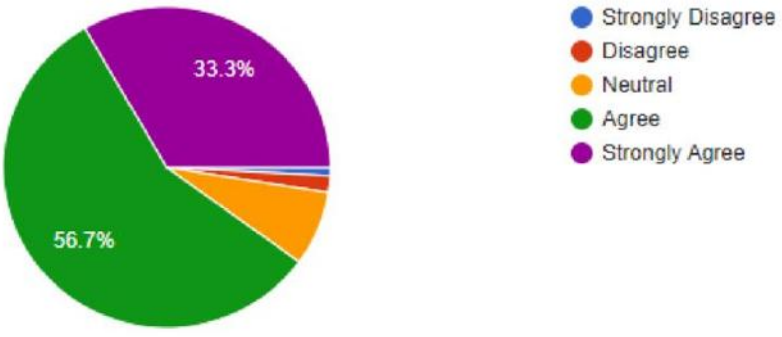
latest shoe offerings. On the contrary, only a very small fraction of respondents, accounting for 0.8% each, strongly disagree or disagree with the notion that Nike's latest shoe line is highly innovative. Additionally, 15% of respondents remain neutral on the matter, suggesting a lack of strong opinion or uncertainty regarding the level of innovation in Nike's latest shoes.

Overall, the data suggests a prevailing sentiment among respondents that Nike's latest line of shoes is indeed highly innovative, with only a minority expressing dissenting views or remaining undecided.

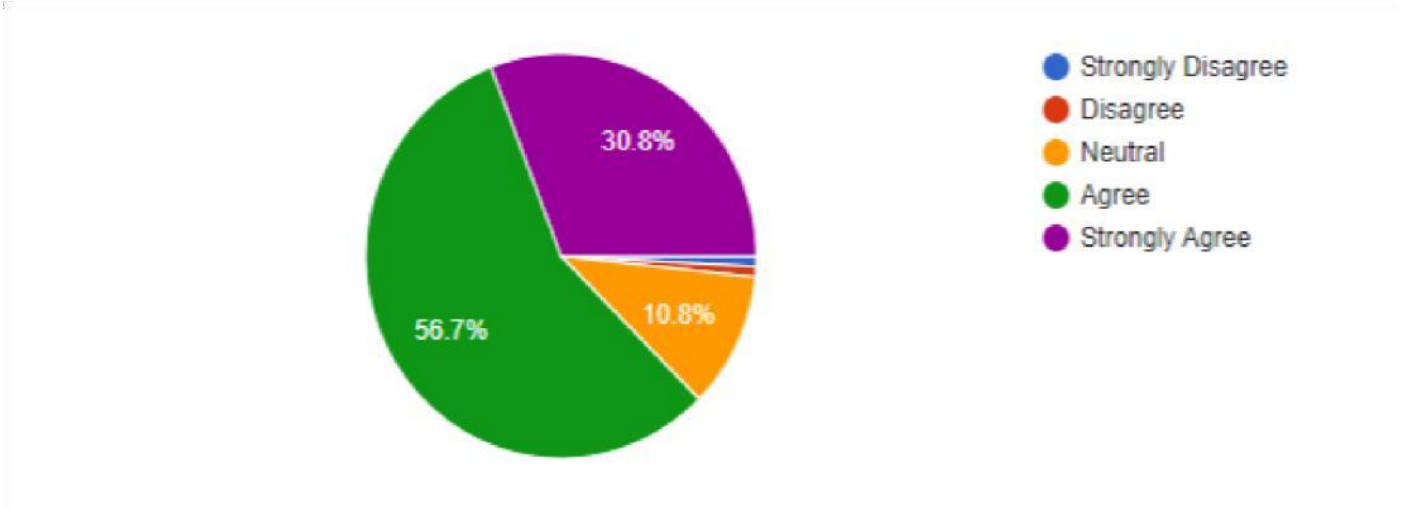
I am satisfied with the overall durability and lifespan of Nike shoes.

Table No. : 4.2.10

Level of Agreement	**No of Respondents**	**Percentage (%)**
Strongly Disagree	1	0.8%
Disagree	2	1.7%
Neutral	9	7.5%
Agree	68	56.7%
Strongly Agree	40	33.3%
Grand Total	**120**	**100**



The provided data offers insights into respondents' satisfaction levels regarding the overall durability and lifespan of Nike shoes. It reveals that a significant majority of respondents, comprising 56.7% of the total, agree that they are satisfied with the overall durability and lifespan of Nike shoes. Moreover, 33.3% of respondents strongly agree with this statement, indicating a substantial proportion of individuals who express a high level of satisfaction with



Nike shoes in terms of durability and lifespan. On the contrary, only a very small fraction of respondents, accounting for 0.8% each, strongly disagree or disagree with the notion that they are satisfied with the durability and lifespan of Nike shoes. Additionally, 7.5% of respondents remain neutral on the matter, suggesting a lack of strong opinion or uncertainty regarding their satisfaction with Nike shoes' durability and lifespan. Overall, the data suggests a prevailing sentiment among respondents that they are indeed satisfied with the overall durability and lifespan of Nike shoes, with only a minority expressing dissenting views or remaining undecided.

Nike shoes maintain their shape and structure well over time.

Table No. : 4.2.11

Level of Agreement	**No of Respondents**	**Percentage (%)**
Strongly Disagree	1	0.8%
Disagree	1	0.8%
Neutral	13	10.8%
Agree	68	56.7%
Strongly Agree	37	30.8%
Grand Total	**120**	**100**

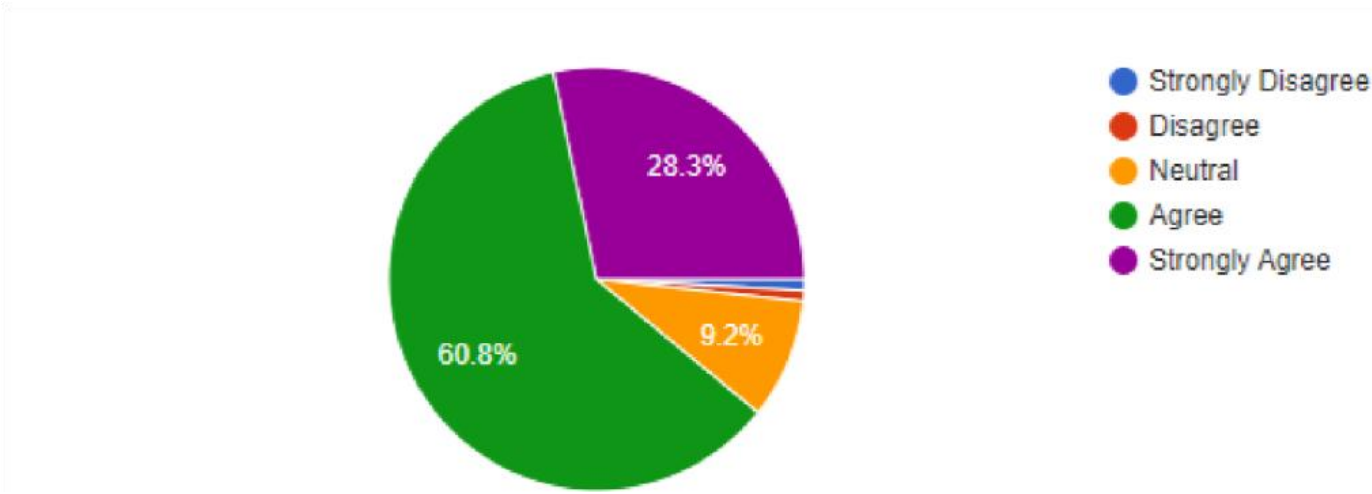
The data provided offers insights into respondents' perceptions regarding the ability of Nike shoes to maintain their shape and structure over time. It indicates that a significant majority of respondents, comprising 56.7% of the total, agree that Nike shoes do indeed maintain their shape and structure well over time. Moreover, 30.8% of respondents strongly agree with this statement, indicating a substantial proportion of individuals who express a high level of confidence in the longevity of Nike shoes' shape and structure. On the contrary, only a very small fraction of respondents, accounting for 0.8% each, strongly disagree or disagree with the notion that Nike shoes maintain their shape and structure well over time. Additionally, 10.8% of respondents remain neutral on the matter, suggesting a lack of strong opinion or uncertainty regarding the ability of Nike shoes to retain their shape and structure. Overall, the data suggests a prevailing sentiment among respondents that Nike shoes are indeed effective in maintaining their shape and structure over time, with only a minority expressing dissenting views or remaining undecided.

Nike uses high- quality materials in their shoe construction.

Level of Agreement	No of Respondents	Percentage (%)
Strongly Disagree	1	0.8%
Disagree	1	0.8%
Neutral	11	9.2%
Agree	73	60.8%
Strongly Agree	34	28.3%
Grand Total	**120**	**100**

Table No. : 4.2.12

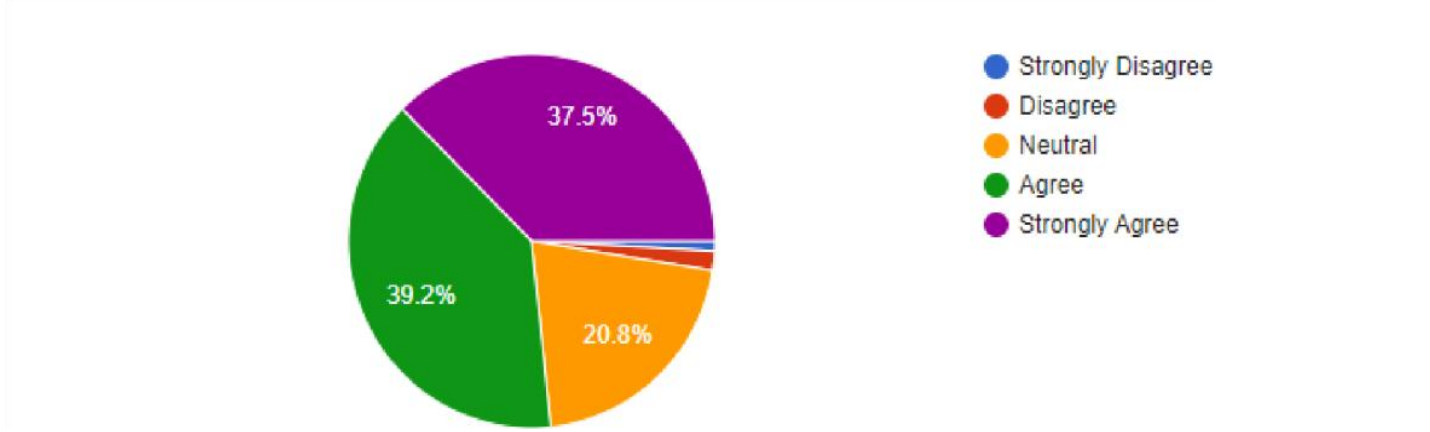
The data provided gives insights into respondents' perceptions regarding the use of high-quality materials in Nike's shoe construction. It reveals that a significant majority of respondents, constituting 60.8% of the total, agree that Nike uses high-quality materials in their shoe construction. Moreover, 28.3% of respondents strongly agree with this statement, indicating a substantial proportion of individuals who hold a strong belief in the quality of materials used by Nike. On the other hand, only a very small fraction of respondents, accounting for 0.8% each, strongly disagree or disagree with the notion that Nike utilizes high-quality materials in their shoes. Additionally, 9.2% of respondents remain neutral on the matter, suggesting a lack of strong opinion or uncertainty regarding the quality of materials used by Nike. Overall, the data suggests a prevailing sentiment among respondents that Nike indeed employs high-quality materials in their shoe construction, with only a minority expressing dissenting views or remaining undecided.



. The overall quality and craftsmanship of Nike shoes are superior compared to other shoe brands.

Table No. : 4.2.13

Level of Agreement	No of Respondents	Percentage (%)
Strongly Disagree	1	0.8%
Disagree	2	1.7%
Neutral	25	20.8%
Agree	47	39.2%
Strongly Agree	45	37.5%
Grand Total	**120**	**100**

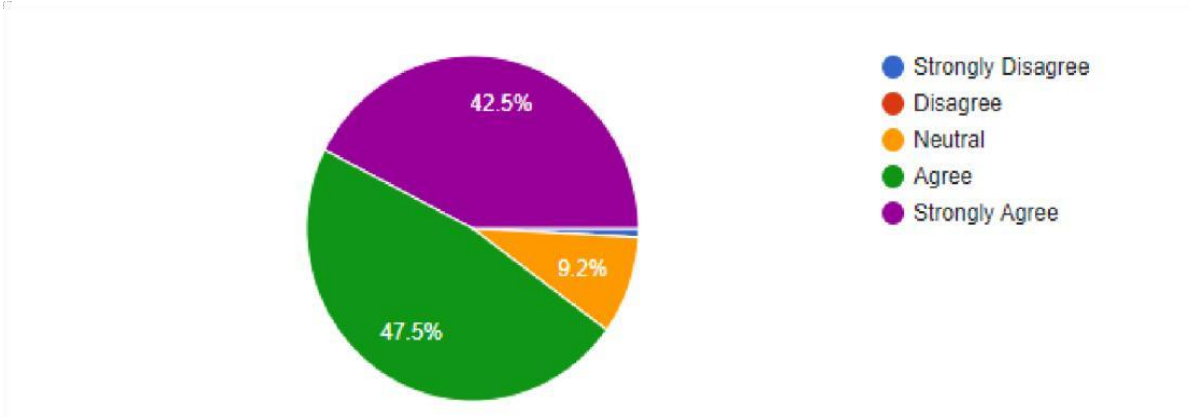


The data provided offers insights into respondents' perceptions regarding the overall quality and craftsmanship of Nike shoes compared to other shoe brands. It indicates that a significant proportion of respondents, comprising 39.2% of the total, agree that the overall quality and craftsmanship of Nike shoes are superior to other brands. Additionally, 37.5% of respondents strongly agree with this statement, suggesting a substantial portion of individuals who hold a strong belief in Nike's superiority in terms of quality and craftsmanship. Conversely, only a very small fraction of respondents, accounting for 0.8% each, strongly disagree or disagree with the notion that Nike shoes excel in quality and craftsmanship compared to other brands. Additionally, 20.8% of respondents remain neutral on the matter, suggesting a lack of strong opinion or uncertainty regarding Nike's superiority. Overall, the data suggests a prevailing sentiment among respondents that Nike shoes indeed offer superior quality and craftsmanship compared to other brands, with only a minority expressing dissenting views or remaining undecided.

I am highly confident in the overall quality and reliability of Nike shoes.

Table No. : 4.2.14

Level of Agreement	**No of Respondents**	**Percentage (%)**
Strongly Disagree	1	0.8%
Disagree	0	-
Neutral	11	9.2%
Agree	57	47.5%
Strongly Agree	51	42.5%
Grand Total	**120**	**100**

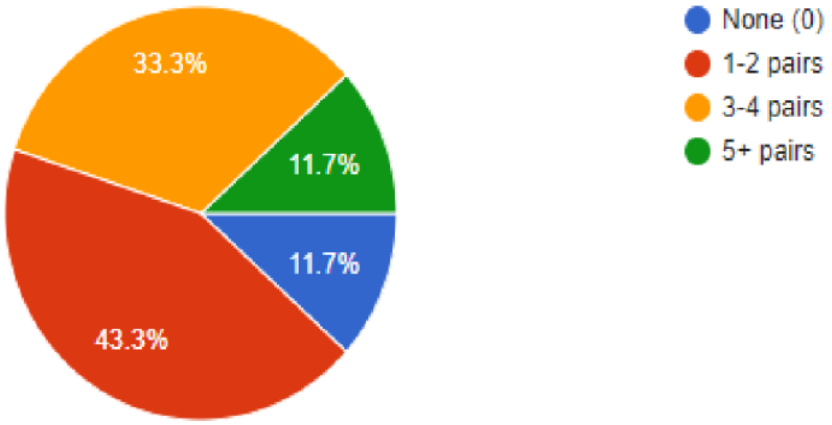


The data provided reveals respondents' confidence levels in the overall quality and reliability of Nike shoes. A substantial majority, totaling 90% of respondents, either agree or strongly agree with this statement, indicating a high level of confidence in Nike's products. Among them, 42.5% strongly agree, suggesting a significant portion of respondents who have unwavering trust in the quality and reliability of Nike shoes. Interestingly, no respondents express disagreement with the statement, signaling a widespread positive sentiment towards Nike's footwear. However, 9.2% of respondents remain neutral, indicating a degree of uncertainty or lack of strong opinion regarding the matter. Overall, the data portrays a prevailing sentiment of confidence among respondents regarding the overall quality and reliability of Nike shoes, with only a minority expressing neutrality.

In the past year, how many pairs of Nike shoes have you purchased?

Table No. : 4.2.15

Shoe Pair	**No of Respondents**	**Percentage (%)**
None (0)	14	11.7%
1-2 Pairs	52	43.3%
3-4 Pairs	40	33.3%
5+ Pairs	14	11.7%
Grand Total	**120**	**100**



The provided data offers insights into the purchasing behavior of respondents regarding Nike shoes over the past year. It reveals that a majority of respondents, comprising 76.6% of the total, have purchased Nike shoes within this timeframe. Among these purchasers, the most common buying pattern was acquiring 1-2 pairs, accounting for 43.3% of respondents.

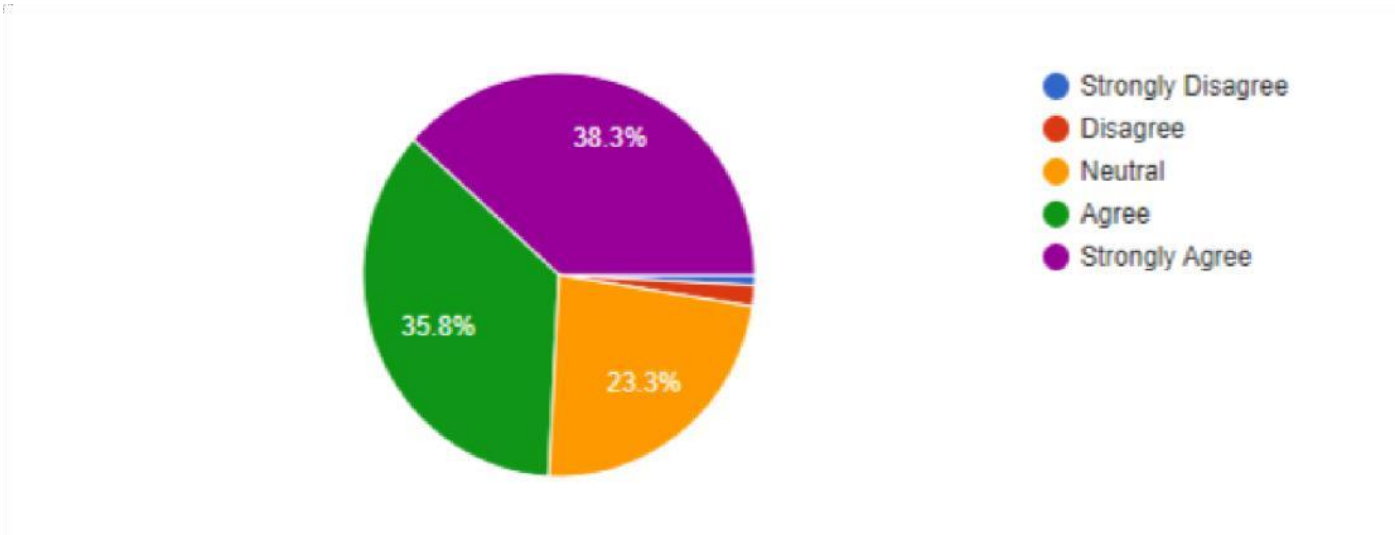
Following closely behind, 33.3% of respondents purchased 3-4 pairs of Nike shoes during the past year, indicating a significant portion of consumers with a higher purchasing frequency. Moreover, 11.7% of respondents bought 5 or more pairs of Nike shoes, demonstrating a notable commitment to the brand or potentially indicating the presence of enthusiasts or

collectors within the respondent pool. Conversely, 11.7% of respondents did not purchase any Nike shoes within the past year, suggesting either a lack of interest in the brand or a lower frequency of footwear purchases overall. Overall, the data highlights a varied purchasing behavior among respondents, with a majority having bought Nike shoes in the past year, and a notable portion making multiple purchases during this timeframe.

When I need new athletic shoes, Nike is one of the first brands I consider.

Table No. : 4.2.16

Level of Agreement	No of Respondents	Percentage (%)
Strongly Disagree	1	0.8%
Disagree	2	1.7%
Neutral	28	23.3%
Agree	43	35.8%
Strongly Agree	46	38.3%
Grand Total	**120**	**100**



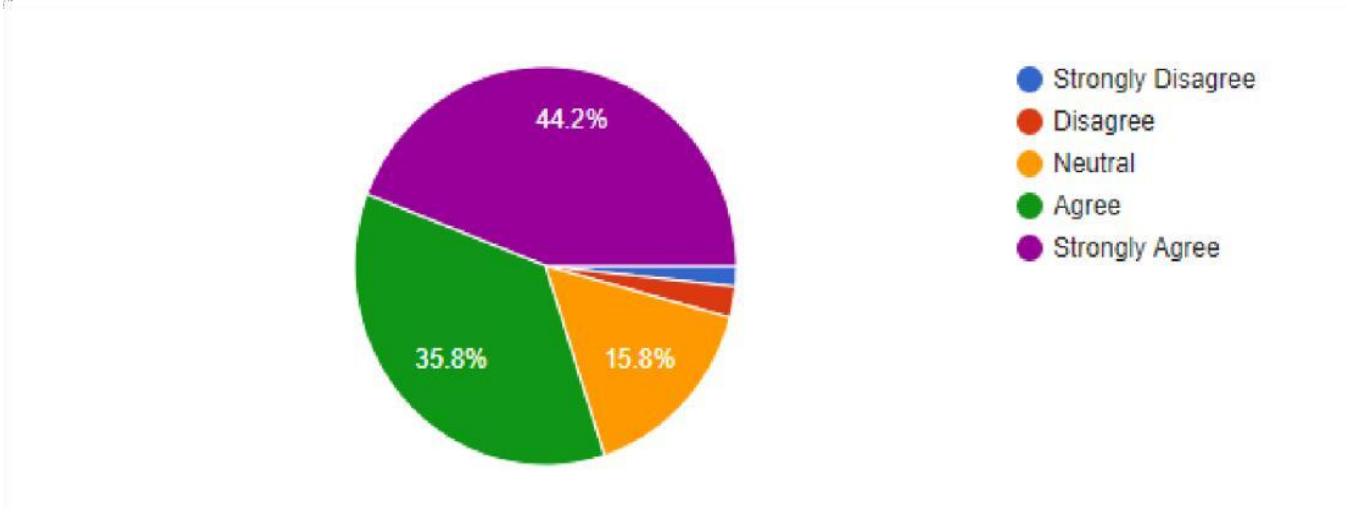
The data provided offers insights into respondents' brand consideration when needing new athletic shoes, particularly highlighting the prominence of Nike in their decision-making process. It reveals that a majority of respondents, comprising 73.3% of the total, either agree or strongly agree that Nike is one of the first brands they consider when in need of new athletic shoes. Among them, 38.3% strongly agree with this statement, indicating a significant portion of individuals who prioritize Nike as their top choice. Additionally, 35.8% of respondents agree with considering Nike early in their decision-making process, further solidifying the brand's position in their consideration set. Conversely, only a very small fraction of respondents, accounting for 0.8% each, strongly disagree or disagree with the notion of considering Nike early on. Furthermore, 23.3% of respondents remain neutral on the matter, suggesting a lack of strong opinion or uncertainty regarding Nike's prominence in their consideration set. Overall, the data suggests a prevailing sentiment among respondents that Nike holds a prominent position in their consideration when needing new athletic shoes,with only a minority expressing dissenting views or remaining undecided.

I often find myself recommending Nike shoes to friends and family.

Table No. : 4.2.17

Level of Agreement	No of Respondents	Percentage (%)
Strongly Disagree	2	1.7%
Disagree	3	2.5%

Neutral	19	15.8%
Agree	43	35.8%
Strongly Agree	53	44.2%
Grand Total	**120**	**100**

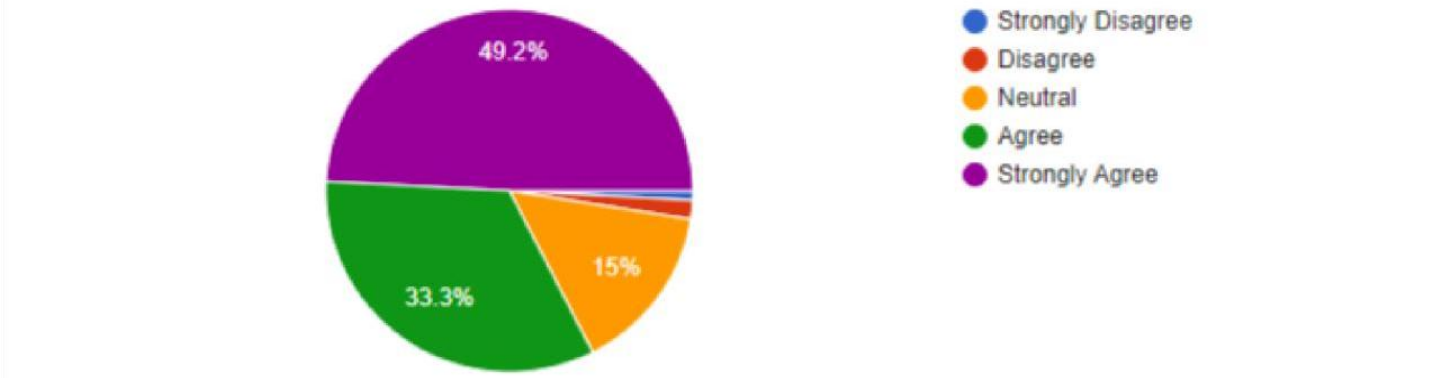


The data provided offers insights into respondents' willingness to recommend Nike shoes to friends and family. It reveals that a significant majority of respondents, comprising 80% of the total, either agree or strongly agree with the statement. Among them, 44.2% strongly agree with the sentiment, indicating a substantial portion of individuals who hold a strong conviction in recommending Nike shoes to their social circle. Additionally, 35.8% of respondents agree with the idea of recommending Nike shoes, further highlighting the brand's positive perception among respondents. Conversely, only a very small fraction of respondents, accounting for 4.2% in total, strongly disagree or disagree with the notion of recommending Nike shoes to friends and family. Furthermore, 15.8% of respondents remain neutral on the matter, suggesting a lack of strong opinion or uncertainty regarding recommending Nike shoes. Overall, the data suggests a prevailing sentiment among respondents that they are highly willing to recommend Nike shoes to their friends and family,with only a minority expressing dissenting views or remaining undecided.

When considering my next shoe purchase, Nike is one of the brands I would strongly consider.

Table No. : 4.2.18

Level of Agreement	**No of Respondents**	**Percentage (%)**
Strongly Disagree	1	0.8%
Disagree	2	1.7%
Neutral	18	15%
Agree	40	33.3%
Strongly Agree	59	49.2%
Grand Total	**120**	**100**

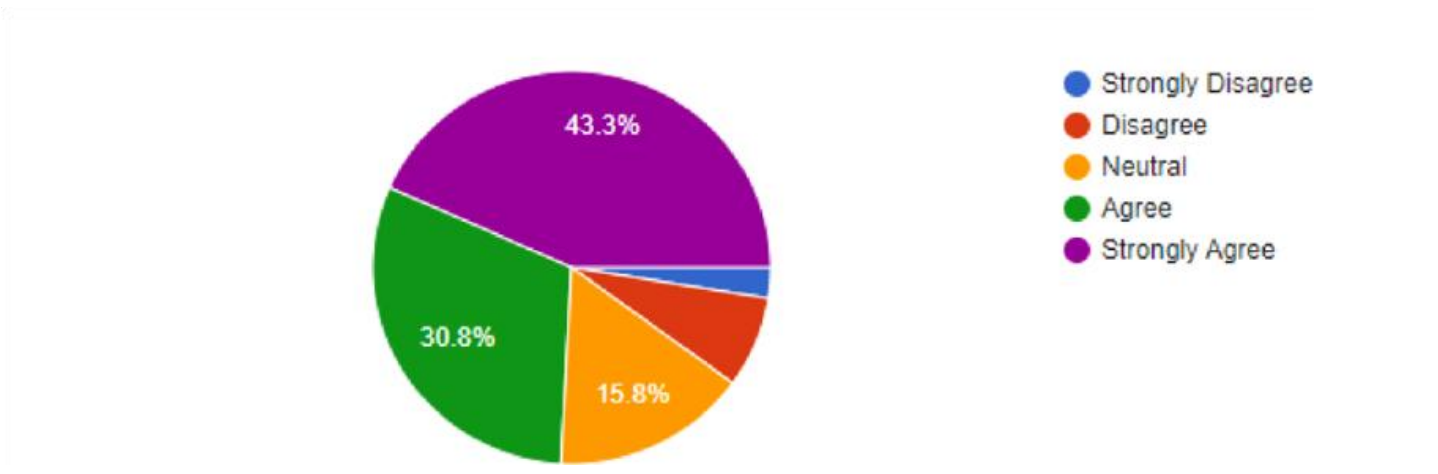


The data provided reveals a significant inclination among respondents to strongly consider Nike as one of the primary brands for their next shoe purchase. Overwhelmingly, 82.5% of respondents either agree or strongly agree with this sentiment, indicating a strong preference for Nike footwear. Among them, nearly half (49.2%) strongly agree, highlighting a substantial portion of individuals who exhibit a firm intention to prioritize Nike in their future shoe-buying decisions. Additionally, 33.3% of respondents agree with the idea of strongly considering Nike, further reinforcing the brand's appeal and influence in the footwear market.

Conversely, a negligible percentage of respondents (2.5%) express disagreement with the notion of strongly considering Nike, suggesting that for the vast majority of respondents,Nike holds a significant position in their consideration set. Furthermore, 15% of respondents remain neutral, suggesting a degree of indecision or lack of strong preference towards any specific brand. Overall, the data underscores Nike's prominence as a preferred choice for consumers when contemplating their next shoe purchase, with a majority expressing a strong inclination towards the brand.

Even if a new pair of Nike shoes I like is slightly more expensive than similar shoes from other brands, I would still seriously consider buying them.

Level of Agreement	**No of Respondents**	**Percentage (%)**
Strongly Disagree	3	2.5%
Disagree	9	7.5%
Neutral	19	15.8%
Agree	37	30.8%
Strongly Agree	52	43.3%
Grand Total	**120**	**100**

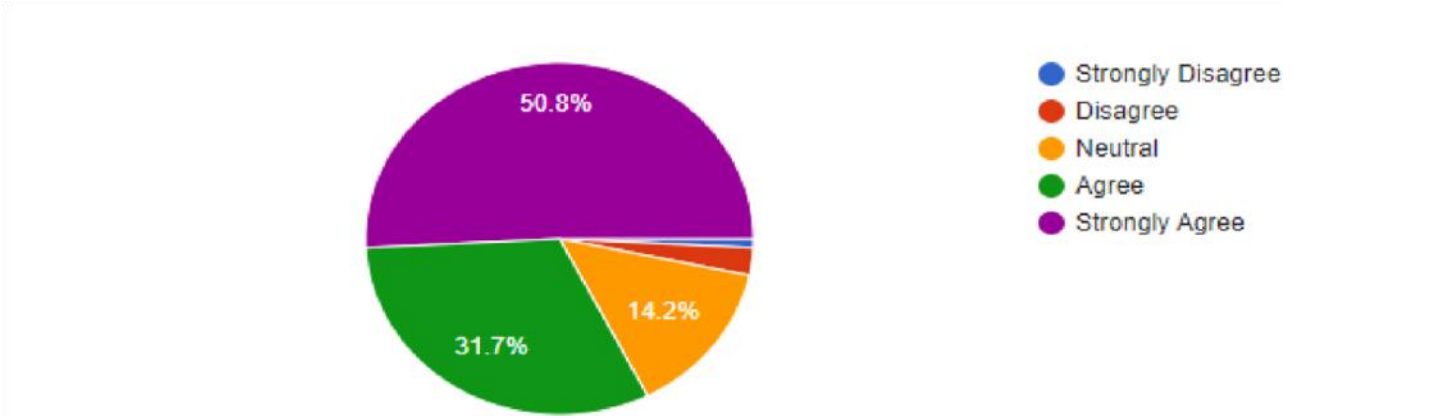


The data provided offers insights into respondents' willingness to prioritize Nike shoes over similar options from other brands, even if they are slightly more expensive. It indicates a notable inclination towards considering Nike despite potential higher costs, with a majority of respondents (73.8%) either agreeing or strongly agreeing with this sentiment. Among them, a significant portion (43.3%) strongly agree, demonstrating a firm intention to prioritize Nike shoes regardless of price differences. Additionally, 30.8% of respondents agree with the idea of seriously considering Nike shoes despite slightly higher costs, further underscoring the brand's perceived value and appeal among consumers. Conversely, a small fraction of

respondents (10%) express disagreement with the notion of considering Nike shoes at a higher price point, indicating that for the majority of respondents, price may not be a deterrent when it comes to purchasing Nike footwear. Furthermore, 15.8% of respondents remain neutral on the matter, suggesting a lack of strong opinion or uncertainty regarding the willingness to pay a premium for Nike shoes. Overall, the data suggests a prevailing sentiment among respondents that they are highly inclined to seriously consider purchasing Nike shoes, even if they come at a slightly higher price compared to similar options from other brands.

I am likely to buy another pair of Nike shoes in the future.

Level of Agreement	**No of Respondents**	**Percentage (%)**
Strongly Disagree	1	0.8%
Disagree	3	2.5%
Neutral	17	14.2%
Agree	38	31.7%
Strongly Agree	61	50.8%
Grand Total	**120**	**100**



The findings of the study clearly indicate a strong and positive relationship between supply chain–logistics integration and business performance as well as sustainable success. The regression analysis shows a high correlation value (R = 0.797), confirming that improvements in supply chain integration significantly enhance business outcomes. The R-square value of 0.635 suggests that approximately 63.5% of the variation in business performance and sustainability can be explained by integration practices, highlighting its critical role in organizational success. The ANOVA results further validate the model's significance, with a p- value less than 0.001, confirming that the relationship between variables is statistically significant. The coefficient analysis reveals that for every one-unit increase in supply chain integration, business performance improves by 0.614 units, indicating a strong direct impact. Descriptive statistics show that respondents generally agree with the importance of integration, with mean values above the neutral point for both supply chain integration (3.62) and

business performance (3.69). Correlation analysis also supports the hypothesis, with a strong positive correlation coefficient (r = 0.797), indicating that higher integration leads to better performance outcomes. Reliability tests demonstrate high internal consistency, with Cronbach's alpha values above 0.87, confirming that the measurement instruments are reliable. Additionally, findings highlight that key dimensions such as information sharing, process integration, and relationship coordination play a significant role in improving operational efficiency, financial performance, and sustainability. Overall, the study confirms that organizations adopting integrated supply chain and logistics practices experience enhanced efficiency, reduced costs, improved customer satisfaction, and better long-term sustainability.

Based on the findings, several recommendations can be proposed to enhance supply chain-logistics integration and improve business performance. First, organizations should invest in advanced technologies such as data analytics, artificial intelligence, and real-time tracking systems to improve visibility and coordination across the supply chain. Technology adoption enables better decision-making, demand forecasting, and operational efficiency. Second, companies should focus on strengthening internal integration by improving communication and collaboration among departments such as procurement, production, and logistics. A well-integrated internal system serves as the foundation for effective external integration with suppliers and customers. Third, organizations should build strong relationships with supply chain partners by fostering trust, transparency, and long-term collaboration. Strategic partnerships with suppliers and logistics providers can enhance coordination, reduce uncertainties, and improve overall performance.

Fourth, businesses should adopt sustainable practices by optimizing transportation routes, reducing waste, and minimizing carbon emissions. Green logistics initiatives not only support environmental goals but also improve cost efficiency and brand reputation. Additionally, companies should implement performance measurement systems using key performance indicators (KPIs) such as delivery time, cost efficiency, and customer satisfaction. Continuous monitoring helps in identifying inefficiencies and improving integration strategies. Training and skill development programs should also be introduced to enhance employee capabilities in supply chain management and digital technologies. Skilled human resources play a vital role in successful integration. Lastly, policymakers should continue supporting the logistics sector through infrastructure development, simplified regulations, and digital initiatives. Public- private partnerships can further enhance logistics efficiency in India.

CONCLUSION

In conclusion, this study successfully demonstrates the significant impact of supply chain-logistics integration on business performance and sustainable success. The research highlights that integration is not merely an operational necessity but a strategic approach that drives efficiency, competitiveness, and long-term growth. The strong statistical results, including high correlation and regression values, confirm that organizations with higher levels of integration perform better in terms of operational efficiency, financial outcomes, and sustainability. The study emphasizes that effective integration involves coordination across internal functions as well as collaboration with external partners such as suppliers and customers. Key elements such as information sharing, process alignment, and technological adoption play a crucial role in achieving seamless integration. Organizations that leverage these elements are better equipped to respond to market changes, reduce costs, and enhance customer satisfaction. Furthermore, the research underscores the importance of sustainability in modern supply chains. Integrated systems enable efficient resource utilization, reduced environmental impact, and improved social responsibility, contributing to long-term success. In the context of the Indian economy, the study highlights both opportunities and challenges, including infrastructure gaps, high logistics costs, and the need for technological advancement. Despite certain limitations, such as a restricted sample size and reliance on student perceptions, the study provides valuable insights for managers, researchers, and policymakers. It bridges the gap between theoretical concepts and practical applications in supply chain management. Overall, the research concludes that supply chain– logistics integration is a key driver of business performance and sustainable success.

Organizations that prioritize integration and adopt innovative strategies will be better positioned to achieve competitive advantage and thrive in an increasingly dynamic and globalized business environment.

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2. Dr. S Varalakshmi, Professor, Email: s.varalakshmi@mazcol.edu.om
3. Dr. Ambrish Singh, Assistant Professor (Management), Rijkiya Engineering College Azamgarh, Uttar Pradesh, Email: drambrish@gecazamgarh.ac.in
4. Dr. Pradeep Kumar Mishra, Associate Professor, Faculty of Management Studies, Sankalchand Patel University, Gujarat, Email: pkmishra.fms@spu.ac.in
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